

EXPLANATION OF PLATE VI.

CLASTOPTERA XANTHOPHALA, *var. glaucus*.

- a. Chrysanthemum branch showing the spittle.
- b. Terminal part of abdomen of Clastoptera with the anal segment open and in action.
- c. The same in repose and closed.
- d. Young larva.
- e. Grown larva.
- f. Pupa with wing pads.
- g. Winged adult.
- h. Front part of head of adult.

—Mr. Cook read the following paper :

DUOPORUS, A NEW DIPLOPOD FROM MEXICO.

By O. F. COOK.

As part of a small but interesting series of Mexican Diplopoda collected by Mr. O. W. Barrett, this peculiar member of the order Merocheta is worthy of special mention. It agrees with *Stenodesmus* Saussure and *Biporodesmus* Attems, and differs from all other known Diplopoda in the possession of but a single pair of repugnatorial pores, located on the fifth segment. But notwithstanding the resemblance in this particular, it is evident that the new form has little, if any, affinity with either of the above genera. *Stenodesmus*, also a native of Mexico, is a large animal (65 millimeters) with a granular-tuberculate dorsal surface and a spine on the second joint of the legs, which last feature has been supposed to ally it with *Fontaria*. The South American genus *Biporodesmus* is also an animal of considerable size (45 millimeters), with a flat or concave, granular dorsum, a vertex sulcus, and complex, three-pronged copulatory legs, to say nothing of minor discrepancies. The new genus, to be called *Duoporus*, has a small, rather slender body, much narrower behind than in front, and gradually tapering from near the head. The dorsal surface is strongly convex, smooth and shining, and the posterior corners of the carinæ are long and spiniform. The copulatory legs are remarkably simple, the second joint consisting of a simple falcate process; they thus bear a much greater general resemblance to those of *Sphæriodesmus* than those of *Biporodesmus*.

The existence of three such distinct types with the same pore-formula is, however, but one of many evidences that pore characters, though of great systematic utility in the Diplopoda, do not

of themselves justify either wide systematic separation, nor, on the other hand, do they supply evidence of close affinity. There appear, in other words, to have been many independent aberrations of the normal pore-formula of the twenty-segmented Diplopoda, and as these variations have probably not been encouraged by selection and have had little or no bearing upon other aspects of the evolution of the group, there is little reason to expect that it will be possible to utilize the pore-formulas as primary characters in the presentation of a phylogenetic classification of the order Merocheta.

DUOPORUS, new genus.

Type: *Duoporus barretti*.

Distribution: Mexico.

Body small; about seven times as long as broad; broadest in front; gradually narrowed caudad.

Antennæ slender, distinctly clavate; joints in order on length, 6, 2, 3, 5, 4, 1, 7. Joints 3 to 5 subequal, but distinctly smaller than 6 and 2, which are also nearly equal in length, but 6 is much broader and slightly longer. Olfactory cones four.

Vertex smooth, strongly convex, the suture distinct, but the sulcus wanting.

First segment semi-elliptic; broader than the head, slightly narrower than the second segment; slightly emarginate in the middle behind, and with a fine raised rim on the anterior and lateral margins; corners not produced.

Segments dorsally rather strongly and evenly convex, the surface smooth and shining, not marked by a transverse sulcus or depression.

Lateral carinæ moderately broad, about one-fourth as wide as the body cavity, inserted near the middle of the side; broader on anterior segments. On all segments behind the second the carinæ are more or less falcate, that is, emarginate on the posterior margin, and with the posterior corner sharply produced caudad; this feature is much more pronounced on posterior segments, the carinæ of which are narrow and sharply spiniform. With the exception of a very minute notch near the rounded anterior corner, the margin is entire, thin, and with a very fine raised rim.

Repugnatorial pores present only on segment 5, the aperture minute and without a raised rim; located in a distinct depression just inside the unmodified raised margin of the carina.

Supplementary margin very short, concealed under the posterior margin of the segment.

Last segment longer than the preceding, subtriangular in outline, with apex abruptly narrowed and truncate; setiferous tubercles minute.

Anal valves smooth, margin slightly prominent, setiferous tubercles minute.

Preanal scale nearly as long as broad, rounded, apex not produced; tubercles obsolete.

Sterna nearly naked, smooth, a small conical spine at the base of each leg, larger on the posterior pair and more acute on posterior segments.

Anterior legs of male slightly crassate, joints unarined.

Second legs of male with coxæ produced posteriorly into sharp conical processes.

Male genitalia with the basal joint rather large, prominent, and bulb-like; second joint simple, subfalcate.

DUOPORUS BARRETTI, new species.

Type: Deposited in the U. S. Nat. Museum (No. 781).

Locality: Cuernavaca, Mexico.

Length, 12 to 14 mm.; width, 1.9 to 2 mm.

Color of fresh alcoholic specimens pale purplish.

In the absence of cephalic and dorsal sculpture and other features usually treated as of specific importance, little in the way of specific description can be written to other purpose until other species are discovered.

Legs rather sparsely hirsute with short hairs; the conical processes of the basal joint of the second pair of legs of the male may possibly consist of agglutinated hairs, though this is improbable. They arise from the posterior rather than from the ventral face of the joint.

The copulatory legs are also remarkably simple; the basal joint is rather prominent, subcylindric and nearly naked; the apical is bent cephalad near the base, and tapers abruptly into a simple subfalcate process which keeps its size to near the rather blunt tip.

The above description is based on three male specimens collected at Cuernavaca, Mexico, in 1898, by Mr. O. W. Barrett, for whom the species is named.

—The last paper was by Mr. Benton and was entitled "Queen Clippings, and the management of bees in swarming." The speaker remarked upon the difficulty of deciding as to the advisability of clipping the wings of queens, and gave some details as to the proper method of handling swarming bees.

NOVEMBER 2, 1899.

The 146th regular meeting was held at the residence of Mr. C. L. Marlatt, 1440 Massachusetts ave. President Gill in the chair, and Messrs. Johnson, Dyar, Motter, Ashmead, Caudell, Busck, Vaughan, Schwarz, Marlatt, Heidemann, Uhler, Benton, Patten,